REMARKS

Claims 9 through 17 were rejected under 35 U.S.C. §103 for obviousness predicated upon Tsukitani in view of Wysocki.

Claims 1 through 8 were rejected under 35 U.S.C. §103 for obviousness predicated upon Tsukitani in view of Wysocki and Ghera.

Each of the above rejections under 35 U.S.C. §103 is traversed. Specifically, Applicants submit that each of the imposed rejections under 35 U.S.C. §103 is predicated upon an inaccurate factual determination as the teachings of the primary reference of Tsukitani. That misinterpretation of Tsukitani's disclosure is not cured by the secondary references.

In rejection the claims under 35 U.S.C. §103, the Examiner asserted that "Tsukitani also discloses the use of the fiber as an optical amplifier...." (page 2 of the August 5, 2003 Office Action under the second enumerated section). This determination is **not accurate**. Indeed, it should be apparent from column 1, lines 23 through 35, that Tsukitani merely discloses a **general** structure of an optical transmission system. Tsukitani does **not** teach or suggest that the disclosed optical fiber is applicable to or used as an optical amplifier.

Moreover, in column 2, lines 44 through 46, Tsukitani discloses an optical fiber effectively restraining the occurrence of non-linear phenomena as a part of optical transmission line. As one having ordinary skill in the art would have recognized, an optical fiber applied to a RAMAN amplifier must have a higher nonlinearity. Therefore, based upon Tsukitani's disclosure, a factual basis exist upon which to predicate the conclusion that one having ordinary skill in the art would **not** have considered Tsukitani's fiber, which is a dispersion-equalizing optical fiber, suitable for application to a RAMAN amplifier.

In imposing a rejection under 35 U.S.C. §103, the Examiner is required to identify a source in the applied prior art for each claim limitation and a source in the applied prior art for the requisite motivational element. *Smiths Industries Medical System v. Vital Signs Inc., 183 F.3d 1347, 51 USPQ2d 1415 (Fed. Cir. 1999).* In establishing the requisite motivation, the Examiner must make a "thorough and searching" factual inquiry and, based upon that factual inquiry, explain **why** one having ordinary skill in the art would have been realistically impelled to combine the applied references in a particular manner to arrive at the claimed invention, i.e., employ Tsukitani's fiber as a transmission fiber for RAMAN amplification. *In re Lee, 237 F.3d 1338, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).* That burden has not been discharged.

Firstly, as previously pointed out, Tsukitani does not disclose the use of a fiber for RAMAN amplification. In fact, based upon Tsukitani's disclosure the optical fiber effectively restrains the incurrence of nonlinear phenomenon; whereas, a fiber applied to RAMAN amplification must have a high nonlinearality, one having ordinary skill in the art would **not** have been realistically impelled to employ Tsukitani's fiber for RAMAN amplification with a **reasonable expectation of success**, as judicially required. *In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).* Accordingly, a basis exist upon which to predicate the conclusion that one having ordinary skill in the art would not have been led to employ Tsukitani's fiber for RAMAN amplification, as in the RAMAN amplifier disclosed by Wysocki. *In re Lee, supra.*

Moreover, Applicants would go one step further and argue that Tsukitani's disclosure of a fiber (dispersion-equalizing optical fiber) which effectively restrains the incurrence of nonlinear phenomenon constitutes a **teaching away** from employing it for RAMAN

amplification and, hence, constitutes a clear **teaching away** from the claimed invention. Such a **teaching away** from the claimed invention constitutes evidence of **nonobviousness**. *In re Bell, 991 F.2d 781, 26 USPQ2d 1529 (Fed. Cir. 1993); Specialty Composites v. Cabot Corp., 845 F.2d 981, 6 USPQ2d 1601 (Fed. Cir. 1988); In re Hedges, 783 F.2d 1038, 228 USPQ 685 (Fed. Cir. 1986) W. L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983); In re Marshall, 578 F.2d 301, 198 USPQ 344 (CCPA 1978).*

Based upon the foregoing, it should be apparent that a prima facie basis to deny patentability the claimed invention has not been established for lack of the requisite factual basis and want of the requisite realistic motivation. Moreover, upon giving due consideration to the **teaching away** from the claimed invention by the primary reference to Tsukitani, the conclusion appears inescapable that one having ordinary skill in the art would **not** have found the claimed invention **as a whole** obvious within the meaning of 35 U.S.C. §103. *In re Piasecki, 745 F.2d 1468, 223 USPQ 785 (Fed. Cir. 1984).* Applicants, therefore, submit that the imposed rejection of claims 9 through 17 under 35 U.S.C. §103 for obviousness predicated upon Tsukiani in view of Wysocki is not factually or legally viable and, hence, solicits withdrawal thereof.

As the tertiary reference to Ghera does not cure the argued deficiencies in the attempted combination of Tsukitani and Wysocki, Applicants further submit that the imposed rejection of claims 1 through 8 under 35 U.S.C. §103 for obviousness predicated

upon Tsukitani in view of Wysocki and Ghera is not factually or legally viable and, hence, solicit withdrawal.

Based upon the foregoing, it should be apparent that the imposed rejections have been overcome and that all pending claims are in condition for immediate allowance. Favorable consideration is, therefore, respectfully solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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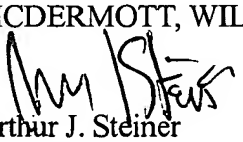

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